Catalogue of American Amphibians and Reptiles.

MacCulloch, R.D. and A. Lathrop. 2006. *Stefania roraimae*.

Stefania roraimae Duellman and Hoogmoed
Roraima Stefania; Rana Stefania de Roraima

Stefania roraimae Duellman and Hoogmoed 1984: 24. Type-locality: "Roraima, Guyana, 1402 m." Holotype, Centre for the Study of Biological Diversity, University of Guyana (CSBD-UG) 10, adult female, collected by M. Tamessar, 24 October 1973 (not examined by authors).
Stefania sp. "A" Hoogmoed 1979: 272.

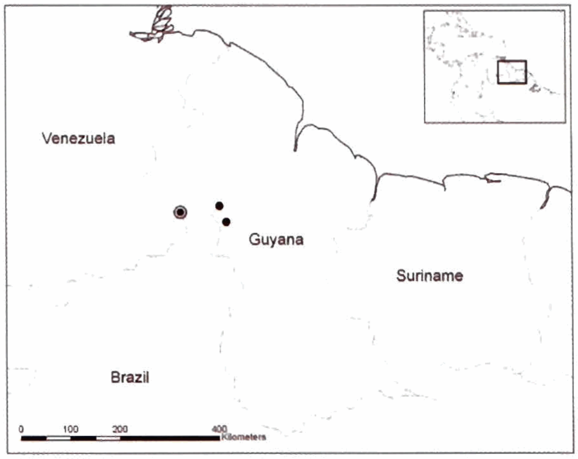
• **CONTENT**. No subspecies are recognized.

• **DEFINITION**. Adult females range in SVL from 36–68 mm, males 36–46 mm. The smallest recorded in-dependent juveniles are 19 mm SVL. Head width is 97–98% head length. The distance between nostrils is 73–78% of the interorbital distance and 1.75 times the distance from nostril to tip of the snout. Inter-orbital space is 90–92% the width of the upper eyelid. Frontoparietal ridges are absent. Tympanum is 47% of eye diameter, separated from eye by a distance equal to the tympanum diameter. Vomerine processes each bear 8–10 teeth. The skin of the dorsum is smooth, shagreened in larger individuals. Rounded warts are present in the temporal and post-tympanic regions, with low warts also present in the loreal region. The first finger is longer than the second. The largest finger disc is 75% of the tympanum diameter. Supernumerary tubercles on the hands and feet are indistinct and low. Toe webbing formula is **I** 2 –2) - (2–2½) **II** (1¾–2^-) - (2½–3) **III** (2–2½) - (3–3¾) **IV** (3–3½) - (2–2½) **V**.

The dorsum is dark brown or grayish brown. The top of the head and loreal region are golden brown speckled with orange. The canthus rostralis is outlined in black. The upper lip is mottled in black, with one or two irregular bars extending to the margin of the eye in some individuals. A black supratympanic bar extends halfway down the length of the body. Creamy yellow dorsolateral stripes, continuous with an interorbital bar of similar color, extend to the groin. Flanks are burnt orange fading to brown near belly. Belly, throat and thighs are light to medium brown or gray with white spots which are most numerous on throat and chest, and reduced to a few irregularly shaped spots on thighs, arms and flanks. Indistinct transverse bars are present on dorsal surfaces of shanks and forearms. The top third of the iris is golden, the lower two-thirds dark red. Juvenile coloration resembles that of adults by day. At night juveniles are uniformly yellow-green, with only the outline of the dorsolateral and interorbital stripes visible.



Figure 1. *Stefania roraimae*, ROM 39467, from Mount Ayanganna, Guyana (photograph by A. Lathrop).



Map. Distribution of *Stefania roraimae*. The circled dot marks the type-locality at Mt. Roraima. The solid dots are the other known locations, Mt. Ayanganna and Mt. Wokomung. Map courtesy of Blake Matejowsky.

• **DIAGNOSIS**. *Stefania roraimae* can be distinguished from *S. evansi* and *S. scalae* by its basal toe webbing, with 2–3 free phalanges on each toe (1–2 free phalanges in *S. evansi* and *S. scalae*), from *S. ackawaio, S. ayangannae, S. riae, S. tamacuarina* and *S. woodleyi* by its smooth dorsal skin (shagreened or granular), from *S. marahuaquensis* by its concave canthus rostralis (straight), and from *S. percristata* by the absence of enlarged frontoparietal crests (present). All other *Stefania* are in the *S. goini* group, and can be distinguished from *S. roraimae* by head proportions (broader than long in the *S. goini* group).

• **DESCRIPTIONS**. The adult holotype was described by Duellman and Hoogmoed (1984). MacCulloch and Lathrop (2002) and MacCulloch et al. (2006) provided further descriptions based on additional specimens of adults, subadults, and juveniles.

• **ILLUSTRATIONS**. Duellman and Hoogmoed (1984) provided a black-and-white photograph, as well as drawings of the head, palm and sole. A color photograph is in MacCulloch and Lathrop (2002).

• **DISTRIBUTION**. Known from Mounts Roraima,

Ayanganna and Wokomung, Pakaraima Mountains, Guyana, at elevations of 1234–1550 m. The Pakaraima region has not been thoroughly explored, so *S. roraimae* may occur in other locations.

• **FOSSIL RECORD**. None.

• **PERTINENT LITERATURE**. Duellman and Hoogmoed (1984) presented a phylogeny of the genus that included *S. roraimae*. Habitat was described in MacCulloch and Lathrop (2002) and MacCulloch et al. (2006). No information is available on reproduction. A table of diagnostic characters useful for species identification is in MacCulloch and Lathrop (2002) and a key to species is in Señaris et al. (1997).

• **REMARKS**. *Stefania* was placed in the new family Cryptobatrachidae by Frost et al. (2006). Rivero (1970) divided the genus *Stefania* into two species groups; *Stefania roraimae* is in the *S. evansi* group by virtue of its head proportions (head length equal to or greater than width in the *S. evansi* group). The Spanish vernacular name "Rana Stefania de Roraima" is in accordance with Barrio-Amorós (1998). Frank and Ramus (1995) proposed the English vernacular name "Roraima Treefrog"; we feel that the use of "treefrog" for *Stefania* is imprecise and confusing, and therefore propose the name "Roraima Stefania", which is in accordance with names proposed for other *Stefania*, and follows the Spanish example.

• **ETYMOLOGY**. The specific epithet, in the feminine genetive, is derived from the name of Mount Roraima, Guyana, where the holotype was collected.

LITERATURE CITED

Barrio-Amorós, C.L. 1998. Sistemática y biogeografía de los anfibios (Amphibia) de Venezuela. Acta Biol. Venez. 18:1–93.

Duellman, W.E. and M.S. Hoogmoed. 1984. The taxonomy and phylogenetic relationships of the hylid frog genus *Stefania*. Misc. Pub. Univ. Kansas Mus. Nat. Hist. (75):1–39.

Frank, N. and E. Ramus. 1995. A Complete Guide to Scientific and Common Names of Reptiles and Amphibians of the World. NG Publ., Inc., Pottsville, Pennsylvania.

Frost, D.R., T. Grant, J. Faivovich, R.H. Bain, A. Haas, C.F.B. Haddad, R.O. de Sa, A. Channing, M. Wilkinson, S.C. Donnellan, C.J. Raxworthy, J.A. Campbell, B.L. Blotto, P. Moler, R.C. Drewes, R.A. Nussbaum, J.D. Lynch, D.M. Green, and W.C. Wheeler. 2006. The amphibian tree of life. Bull. Amer. Mus. Nat. Hist. (297):1–370.

Hoogmoed, M.S. 1979. The herpetofauna of the Guiana region, p. 241–279. *In* W.E. Duellman (ed.), The South American Herpetofauna: its Origin, Evolution and Dispersal. Univ. Kansas Mus. Nat. Hist. Monogr. (7):1–485.

MacCulloch, R.D. and A. Lathrop. 2002. Exceptional diversity of *Stefania* (Anura: Hylidae) on Mount Ayanganna, Guyana; three new species and new distribution records. Herpetologica 58:327–346.

–, A. Lathrop, and S.Z. Khan. 2006. Exceptional diversity of *Stefania* (Anura: Cryptobatrachidae) II: six species from Mount Wokomung, Guyana. Phyllomedusa 5:31–42.

Rivero, J. 1968 ("1966"). Notes on the genus *Cryptobatrachus* (Amphibia, Salientia) with the description of a new race and four new species of a new genus of hylid frogs. Carib. J. Sci. 6:137–149.

–. 1970. On the origin, endemism, and distribution of the genus *Stefania* Rivero (Amphibia, Salientia) with the description of a new species from southeastern Venezuela. Bol. Soc. Venezolana Cien. Nat. 28:456–481.

Señaris, J.C., J. Ayarzagüena, and S. Gorzula. 1997 ("1996"). Revisión taxonómica del género *Stefania* (Anura: Hylidae) en Venezuela con la descripción de cinco nuevas especies. Publ. Asoc. Amigos de Doñana (7):1–57.

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